

Common Moorhen (*Gallinula chloropus*)

(15 subspecies/populations; 7 within plan area)

Conservation Concern Category:

Moderate Concern

Population Trend (PT)

G. chloropus guami—declining (Delany and Scott 2002; Stinson et al. 1991)

G. chloropus sandvicensis—declining (Delany and Scott 2002: ?); stable (USFWS 2005)

G. chloropus cachinnans—increasing (Delany and Scott 2002: ?)

G. chloropus cerceris—unknown (Delany and Scott 2002)

G. chloropus barbadensis—unknown (Delany and Scott 2002)

G. chloropus pauxilla—unknown (Delany and Scott 2002)

G. chloropus galeata—unknown (Delany and Scott 2002)

“in e NA appears to have expanded its range northward during twentieth century...numerous other local changes in NA breeding distribution but only overall change during twentieth century was slight northward expansion...formerly found on all the Hawaiian Islands, now restricted to Kaua'i, O'ahu, Moloka'i...BBS data 1966-1999 showed a statistically nonsignificant 3.8% annual increase for US and Canada; significant declines however for Canada alone...statistically significant increases in CBCs 1959-1988 for Arizona (13.1%), Texas (2.2%), Louisiana (6.1%), Florida (4.9%) and continent wide (4.5%)...” (Bannor and Kiviat 2002)

“*sandvicensis* currently restricted to Kauai'I and O'ahu...” (L. Takano, pers.comm.)

“Largest loss of breeding range appears to be in Ohio; moorhens are now rare and locally distributed in interior western and central Ohio where formerly locally common and much reduced in the Lake Erie marshes. Similar patterns exist in the literature for Iowa, Indiana, and Wisconsin...” (R. Russell, pers.comm.)

“formerly common in Honduras; in Guatemala it was formerly uncommon and local in winter, mainly on the Pacific slope...the Mariana Is race *guami* originally occurred on Tinian, Saipan, Guam, Pagan and Rota but is now confined to Tinian, Rota, Saipan, and Guam in greatly reduced wetland habitats...*pauxilla* probably increasing in the Panama Canal area...” (Taylor 1998)

Great Lakes Marsh Monitoring Program, decrease in annual population index (-3.5%/yr, 1995-2004, $p=0.059$ (Archer and Timmermans 2004)

BBS data for Canada, significant decrease in annual population index (-4.8%/yr, 1968-2002) (Downes et al. 2003).

PT FACTOR SCORE=3

Population Size (PS)

G. chloropus guami—<375 total individuals (Takano and Haig 2004; Delany and Scott 2002; Stinson et al. 1991)

G. chloropus sandvicensis—<1,000 total individuals (Delany and Scott 2002: ?)

G. chloropus cachinnans—>1,000,000 (Delany and Scott 2002: WCA 2001 (Denver workshop), estimate from BBS for USA & Canada 436,174 pr=1,308,522 total individuals)

G. chloropus cerceris—unknown (Delany and Scott 2002)

G. chloropus barbadensis—unknown (Delany and Scott 2002)

G. chloropus pauxilla—unknown (Delany and Scott 2002)

G. chloropus galeata—unknown (Delany and Scott 2002)

“densities: 0.04-0.05 pairs/ha (New York), 17.5-20.0 pairs/ha (Florida), 0.068 adults/ha to 1.18 adults/ha (Louisiana)...” (Bannor and Kiviat 2002)

“most races are at least locally common...in the US, *cachinnans* is widespread and locally rare to abundant; in the E it is most abundant in coastal areas from s Texas to North Carolina, and from Maryland to Maine, and common elsewhere except in centrally located E states where it is generally rare to uncommon; in the W it is locally common in parts of Arizona, rare to locally common in New Mexico, rare in Nevada and Utah... race is common and widespread in Mexico, uncommon and local in Costa Rica...the race *sandvicensis* is now restricted to a few hundred birds on Oahu and Kauai...*guami* on Guam (90), Saipan (154), Tinian (41), and Rota (2)...the race *ceceris* is common in Puerto Rico but less so in the Virgin Is...the race *pauxilla* is locally common in Panama...” (Taylor 1998)

1.5 pairs/ha (SW shore of Lake Erie (Brackney 1979), 3 pairs/ha and 10 nests/ha in Pennsylvania (Miller 1946), 5.2 pairs/ha near southern Lake Michigan (Beecher 1942)

PS FACTOR SCORE=1

Threats to Breeding Populations (TB)

“declines in OH possibly due to insecticides, raccoon predation, or controlled drawdowns...in New Jersey owing to drainage, development, and industrial pollution, reduction in depth and numbers of marsh pools because of sediment deposition and decline of muskrat population...collection of moorhen eggs reported in

Puerto Rico...modest levels of contaminants found in tissues...food supply of Hawaiian Common Moorhen believed diminished by pesticides...some sources report that loss of natural wetlands has caused decline or disappearance of populations of *G. c. cachinnans* and *G. c. sandvicensis*...decline of rice and lotus cultivation reduced Hawaiian populations...residential, recreational, and agricultural development has adversely affected Hawaiian moorhen habitats...introduced predators (domestic cat, dog, rats, mongoose) affect birds on Hawaiian islands..." (Bannor and Kiviat 2002)

"rice harvesting is harmful to nests and young broods...habitat loss and degradation significantly affect this species...lack of good habitat on Molokai precludes development of a significant population...potential threats from introduced predators...possibly from poaching...species readily exploits newly created habitats and is tenacious in occupied areas...adapts well to situations at urban sites...not particularly sensitive to human disturbance...bad weather may cause significant mortality..." (Taylor 1998)

"The birds are declining due to wetland drainage or alteration, the introduced brown tree snake, and introduced monitor lizard..." (S. Haig and L. Takano, pers comm.)

"loss of natural wetlands probably most important threat..." (H. Hands, pers.comm.)

"a threat...is lack of reliable surveys..." (J. Roberson, pers comm.)

TB FACTOR SCORE=4

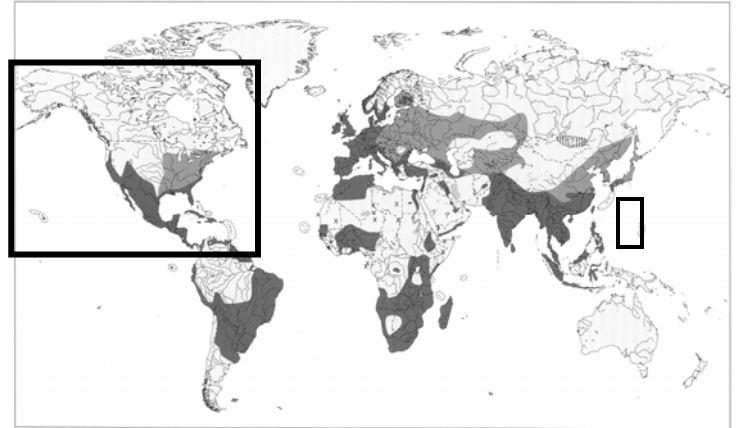
Threats to Non-breeding Populations (TN)

"collision related deaths considered minor...hunting pressure might be too high...road mortality documented...birds sensitive to human disturbance..." (Bannor and Kiviat 2002)

"harvest probably insignificant in the US compared to habitat loss. Few states have hunting seasons and few hunt moorhens..." (H. Hands, pers.comm.)

TN FACTOR SCORE=3

Global Range (Taylor 1998; inset=plan area range) include Marianas



Breeding Distribution (BD)

(from Delany and Scott 2002)

G. chloropus guami—Guam, N Marianas

G. chloropus sandvicensis—Hawaiian Islands

G. chloropus cachinnans—SE Canada & USA S to Panama, Bermuda, Galapagos

G. chloropus cerceris—Greater & Lesser Antilles

G. chloropus barbadensis—Barbados

G. chloropus pauxilla—C & E Panama, N & W Colombia, W Ecuador, NW Peru

G. chloropus galeata—Trinidad & the Guianas S through Brazil to Uruguay, N Argentina

5,040,100 km² (plan area distribution; estimated from range maps)

BD FACTOR SCORE=2

Non-breeding Distribution (ND)

(from Delany and Scott 2002)

G. chloropus guami—Guam, N Marianas

G. chloropus sandvicensis—Hawaiian Islands

G. chloropus cachinnans—USA S to Panama, Bermuda, Galapagos

G. chloropus cerceris—Greater & Lesser Antilles

G. chloropus barbadensis—Barbados

G. chloropus pauxilla—C & E Panama, N & W Colombia, W Ecuador, NW Peru

G. chloropus galeata—Trinidad & the Guianas S through Brazil to Uruguay, N Argentina

5,040,100 km² (plan area distribution; estimated from range maps)

ND FACTOR SCORE=3

Literature Cited:

- Bannor, B. K., and E. Kiviat. 2002. Common Moorhen (*Gallinula chloropus*). In *The Birds of North America*, No. 685 (A. Poole and F. Gills, eds.). The Birds of North America, Inc., Philadelphia, PA. Pp: 20 and 21
- Beecher, W. J. 1942. Nesting birds and the vegetative substrate. Chicago Ornithol. Soc., Chicago.
- Brackney, A. W. 1979. Population ecology of common gallinules in southwestern Lake Erie marshes. M.S. Thesis, Ohio State Univ., Columbus.
- Delany, S. and S. Scott. 2002. *Waterbird Population Estimates – Third Edition. Wetlands International Global Series No. 12*, Wageningen, The Netherlands. Pp: 132-133
- Miller, R. F. 1946. Notes on the Florida gallinule (*Gallinula galeata*) in Philadelphia County, Pa. *Auk* 27:181-184.
- Takano, L.L., and S.M. Haig. 2004. Distribution and abundance of the Mariana Common Moorhen. *Waterbirds* 27: 245-250.
- Taylor, B. 1998. Common Moorhen. In *Rails: A guide to the Rails, Crakes, Gallinules and Coots of the World*. Yale University Press. Pp: 492-503
- U.S. Fish and Wildlife. 2005. Draft Revised Recovery Plan for Hawaiian Waterbirds, Second Draft of Second Revision. U.S. Fish and Wildlife Service, Portland, Oregon. 155 pp.
- Add Marianas recovery plan

Migratory Birds Conservation Division,
Canadian Wildlife Service, Hull, Quebec.
[www.cws-
scf.ec.gc.ca/birds/trends/default_e.cfm](http://www.cws-scf.ec.gc.ca/birds/trends/default_e.cfm)

Additional References:

- E. D. Greij. 1994. Common moorhen. In T. C. Tacha and C. E. Braun, eds. *Migratory shore and upland game bird management in North America*. Allen Press, Lawrence, Kansas.
- Takano, L.L., and S.M. Haig. 2004. Inter- and Intra-island movement patterns, site fidelity, home range, and core area of the Mariana Common Moorhen. *Condor* 106: 652-664.
- Takano, LL. 2003. Seasonal movements, home range, and abundance of the Mariana Common Moorhen (*Gallinula chloropus guami*) on Guam and the Northern Mariana Islands. M.S. thesis, Oregon State University, Corvallis, OR.
- Archer, R.W. and S.T.A. Timmermans. 2004. The Marsh Monitoring Program annual report, 1995-2004: annual indices in bird abundance and amphibian occurrence in the Great Lakes basin. Unpublished report by Bird Studies Canada. xxpp.
- Downes, C.M., B.T. Collins and M. Damus. 2003. Canadian Bird Trends Web site Version 2.1.